

TEKTRONIX

P6243

The Tektronix P6243 is a 1 GHz active FET oscilloscope probe designed for low-circuit-loading signal acquisition on modern high-speed digital designs and surface-mount devices. Featuring an input capacitance of ≤ 1 pF and 1 M Ω input resistance, the P6243 connects directly to TEKPROBE BNC interface oscilloscopes without requiring external power supplies or cables.

SPECIFICATIONS

General

Interfaces	TEKPROBE BNC
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Physical

Power Supply	Powered directly via TEKPROBE BNC interface
Operating Temperature	0 °C to +50 °C °C

Key Performance Specifications

Analog Bandwidth (-3 dB)	1 GHz (probe only)
System Bandwidth	500 MHz (when paired with 500 MHz Tektronix oscilloscopes)
Rise Time (10% to 90%)	<350 ps
Input Capacitance	≤ 1 pF
Input Resistance	1 M Ω
Maximum Non-Destructive Input Voltage	± 15 V (DC + peak AC)
Linear Dynamic Range	± 8 V
Propagation Delay	5.3 ns

Electrical Characteristics

Supported Logic Families	CMOS, BiCMOS, ECL, GaAs, TTL
Attenuation	10X
DC Attenuation Accuracy	$\pm 2\%$
Output Termination	50 Ω

Physical & Mechanical Characteristics

Cable Length	1.3 m
Target Lead/Pitch Compatibility	SMD devices down to 0.5 mm pitch

Connectivity & Host Interface

Host Oscilloscope Interface Type	TEKPROBE BNC Interface
Supported Oscilloscope Series	TDS3000, TDS500, TDS600, TDS700 Series (with TEKPROBE BNC interface)

Power Requirements

Power Source	Self-powered from host oscilloscope via TEKPROBE BNC interface
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Environmental

Non-Operating Temperature	-40 °C to +71 °C
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TECHNOLOGY

Active FET Probing

APPLICATIONS

High-speed digital system design, logic testing (CMOS, BiCMOS, ECL, GaAs, TTL), SMD circuit analysis

Generated by SpecAtlasHub (specatlashub.com). Specifications are compiled from available sources and are subject to change — verify critical values against the manufacturer before purchase.